

CHILD ART AS DESIGN ELEMENTS FOR FABRIC DECORATION

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ABSTRACT

This study conveys to the fore the significance of child visual art works as valuable potential designed elements for the development of fashionable prints for children's wear. With a little modification, the paper reveals the possibility of using these works from the children to promote their creativity in the realm of fabric design. As a practicable project, the practice-based research under the qualitative design methodology was used. The drawings of 411 purposive sampled participants; 2 to 12 year-old boys and girls from Kwame Nkrumah University of Science and Technology Nursery and Primary School (Kwame Nkrumah University of Science and Technology Campus) and D and D Kiddie Kare and Academy (*Deduako*) in kindergarten and basics one to six were systematically examined. Descriptive analysis used, drew on a range of children's art works to provide fresh hypothetical insight into the possibility of using child art as a motif for developing fashionable designed fabric prints. The key findings are that children's developed works of art are innovative and dynamic, give them a sense of joy and identity that develops into relevance when processed into children's fashionable wear. The paper also acknowledges that creativity makes use of the traditional and the conventional methods for developing textile motifs, a promising source of creativeness that has the potential to overwhelm the field of design for children's fashionable wears. Since Art culture is an integral part of every human being, this paper seeks to advocate that textile design experts must engage and elicit children's perspectives and experiences through art

KEYWORDS: Creativity, Fashionable Wears, Conventional Methods, Designed Prints, Child Art

INTRODUCTION

Childhood as a unique period of development was understood more fully in the 17th and 18th centuries, as reflected in the writings of two important European thinkers. John Locke (1690), an English philosopher, argued that the newborn infant comes into the world with no inherited predispositions, but rather with a mind as a "Tabula rasa" (Latin for "blank slate") that is gradually filled with designs, concepts, and knowledge from experiences in their world ("John Locke", 2008). He adds that it was just after this period of the original sin, Tabula rasa and innate goodness views of children that their spontaneous drawings were also seen as valuable to receive some consideration from adults. Children's art finally got to be appreciated on their own merits in the early twentieth century, when major changes were made in aesthetic standards used to judge works of art (Enti, 2008). Locke concluded that the quality of early experiences, particularly how children are raised and educated, shapes the direction of a child's life. In this light, Du Plessis and Conley (2007) and Enti (2008) decried the exploitation of child labour and highlighted the need for educational and social interventions to sharpen the intellectual development of the child as well as to make his emotional development paramount in education when developing educational policies in a bid also to enhance his intellectual development.

A child makes a mark and it is as natural as making sound, gestures and movements. Given a substrate and a means of making a mark, any child will leave a trace of his own drawing activity, a visual record of his contact with that surface (Matthews, 1984). For a child, art is an activity that assembles his thinking, feeling and perception into a new form. Thus, art to the child is mainly a means of self-expression that he cherishes (Lowenfeld & Brittain, 1970 as cited in Osei, 2013). This is true of children regardless of their cognitive, social, visual or even physical abilities. Children will also draw on virtually any surface regardless of whether that surface allows for permanent record of their activity. Selfe (1977) records cases of children whose artistic development seemed very advanced at a young age. Their drawing abilities did not seem to fit into the watertight laws that had been formulated to describe child art. These cases further buttress the need to engage children in art activities that promote their intellectual development. Nevertheless, such cases have created an atmosphere of concern as to whether the right questions are being asked in relation to children's abilities. They certainly undermine any notion of immutable laws regarding the development of child art.

Children's expressions in art provides a way for adults to know how they are experiencing their world. The language of children is unsophisticated; however, they speak meaningfully through their drawings. Children use symbols and images to represent elements in their surroundings, they desire to understand. Examination made in children's preference in choice of colour and design perception addresses these desires. The indication is that children are, and truly desire to be, an inseparable part of what they consume: not only as consumers but also as decision-makers, producers and active contributors to what they wear. Because children are less inhibited and freer to express themselves than under controlled conditions, drawings obtained in a relaxed atmosphere provides them with authentic self-expression. Children are likely to reveal information when prescribed demands are placed on them (Garbarino and Stott, 1989).

Empirical studies conducted in design houses in Ghana indicate that children's designed apparels produced do not have the children's involvement, therefore motifs used are imposed on them. At present, almost all apparels for children have been designed by adults with assumed motifs derived from such source as cartoons of various shapes, objects, animals and fruits. Yet there are no such motifs directly from children or their art for the production of their apparel. The concept of cross-level intellectual competence admonishes experts to be accommodating, learn to take risks, and practice activities that may feel unskilled and uncomfortable. The integration of children into the context of fabric design requires these same considerations. However, the necessity for immediate interventions to engage children in textile designing is a challenge for fabric design experts unaccustomed to working with children of different cultural background and seen as unfamiliar contributors. Additionally, people express their identity through visual expression (e.g. Clothing and interior decoration) which "is part of everybody's life, although it may not be recognized as a conversational art form." The relationship between textile design practitioners and children can be enriched, when engagements in these collaborations form a common ground for mutual fulfilment. In most cases, children's points of view have been absent to conclude on their preference for visual art design; knowledge of these issues has usually been produced by adults (Zelizer, 2002) hence, the need to design and produce children's apparel using their art as motifs. This project thus aimed at bringing to the fore the significance of child visual art works as valuable sources of designing elements for the development of fashionable designed prints for children's apparels. The involvement of children in the process of designing with a little modification of their arts was to promote their creativity. The principal objective was to engage school children between the ages of two and twelve years to design motifs, later to be used by the researchers to produce children's apparel using the hand screen method.

METHODOLOGY

Research Design

Basically a qualitative study, the practice-based research and descriptive research methods were employed to demonstrate and practically produce fashionable designed prints for children's wear which were sewn into different attires for specific occasions using the children's art works. Using the descriptive analysis, the authors drew on a range of children's art works in order to provide fresh hypothetical insight into the possibility of using child art as a motif for developing fashionable designed fabric prints for children's wear.

Population for the Study

The study was conducted in Kumasi where the researchers systematically examined the drawings of 411 purposive sampled pupils, 2- to 12-year-old boys and girls from Kwame Nkrumah University of Science and Technology Nursery and Primary School (Kwame Nkrumah University of Science and Technology Campus) and D and D ChiddieKare and Academy (*Deduako*) in kindergarten and basics one to six. Seventy-six (76) females and ninety-eight (98) males were from KNUST Nursery and Primary School while the number of females and males from D and D ChiddieKare and Academy was eighty-eight (88) and one hundred and forty-nine (149) respectively. It is from this sample the primary data was obtained. Figure 1 shows the total number of males and females engaged in the study. Parental consent and permissions were obtained from the schools before the drawings were used in the study.

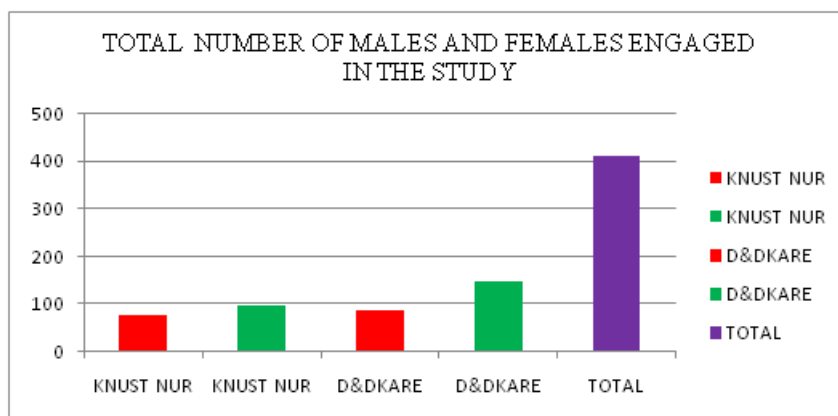


Figure 1: Total Number of Males and Females Engaged in the Study

KEY

- Females in Each School
- Males in Each School
- Total Number of Males and Females

Procedure for Drawing

Acquainting themselves with the set rules of the project, the children were engaged for six weeks. They were provided with the essential materials such as pencils, coloured pencils and A4 sized cartridge sheets to develop their motifs. The motifs were generally derived from imagination and illustrated on the sheets of papers. The results were assessed, selected, and some modified to render them suitable for the project. Several of the children's motifs that they had

sketched in pencil or coloured pencils were selectively developed for the children's wear.

Description of Drawings

At least every child from both schools (K.N.U.S.T and D and D) could tell what he or she had drawn. Only a few could not draw, but rather scribbled on their papers using either bright or dull colours. Drawings made by these children's depicted an everyday activity or something they always see around them, for example; cars, animals, fruits, bouncing castles, see-saws, tables, chairs, balloons, a mother holding the hand of her child, a father driving, a woman carrying a basket, a family holding each other's hand etc.

The sizes of their drawings were mostly under scale, exaggerated and not balanced. These were mostly with the drawings of human beings; the head can be so big with the other parts of the body small. A clear example of this was a boy who drew someone drinking water. In his drawing, the cup from which the person was drinking from being far bigger than the human being who was drinking from it. Their developmental stages in art could account for these 'disparities' in their drawings (Lowenfeld and Brittain, 1970). With the sheet of paper given, most of them drew their images to cover the entire sheets, but few drew their images on one corner of the sheet and therefore could not make good use of the space on the paper.



Figure 2: Total Number of Pupils in Knust Nursery and Primary School

KEY



Some children copied from other colleagues to develop their ideas and others did not understand the instructions given initially until they were asked to draw specific objects. Paradoxically, some children did not take the work seriously. In terms of lines, the drawings made were mostly bold which tells the confidence of the child whilst some strokes which were thin and faint tells of the timidity of the child (Hammer, 1980); however, they were able to interpret what they drew. In terms of colouring, most of them preferred to use bright colours like red, orange, yellow, green, pink, violet etc., to the dull colours such as the blacks. Some coloured beyond the outlines of the drawn objects.

Table 1: Comparison between the Schools Engaged in the Study

K.N.U.ST Nursery School	D & D Academy
They all drew and none scribbled.	Few of them drew whereas most of them scribbled.
One could easily tell what was drawn.	It was very difficult to tell what had been drawn.
They made good use of the spaces provided on the drawing sheet.	They didn't draw that much.
They drew more of human beings, cars, houses, animals and fruits.	They drew more of cars and bouncing castles only.
They are very good in terms of creativity	They are also very good in terms of fluency.

Design Abilities Demonstrated

According to Shuaib and Enoch (2012) the process of designing is an activity of mind, integrating and coordinating between functions and aesthetic. This presupposes that children have artistic values that manifest in their drawing skills and technical know-how fused in harmony to solve technical problems or needs aesthetically. In their capacity as children, they exhibited a level of good design in consonance with these three entities, namely technology, culture and art/aesthetic which are evident in their quest for fabric design motifs. Children have this inbuilt aesthetic knowledge and needs no one to impose it on them; and this was displayed in their works. However, acquiring this knowledge needs reinforcement and the teacher is the best person to provide the environmental conditions that will make the art experience an exciting and rewarding one (Adu-Agyem and Enti, 2009).

Identifying with the child, with his needs and interests in this manner was the best option the designer can have to best understand the needs and desires of children. Moreover, if art is to serve as a vehicle for developmental learning for children and to offer abilities essential for creative expression, problem-solving, and social development (Potter, 2007), then we as design experts must give them the opportunities to stimulate and awaken their thinking faculties. The drawings were grouped into two categories, the scribbling and the realistic images.

Matthews' (1989 and 2003) extensive studies on very young children's drawings suggest that children's 'scribbles' are not meaningless, but a symbolic substratum that demonstrates their development of intelligences, though they cannot verbally articulate them (Rollins, 2005; Skybo, Ryan-Wenger, and Su, 2007). He further states that the child is not only trying to represent objects but is signifying their understanding of the information gained through their detailed records of observations made in their play time and space. The art sessions again, made it possible and easier for the children to express their organizational skills with design elements, forms and general learning and delivery attitudes in the class (Jacobs, 2002; Malchiodi, 2001).

The use of drawing tools, the repetition processes of shapes and colours, flat forms shaded in silhouettes were all a demonstration of their design abilities. Some figures were drawn in abstracted and semi-abstracted forms with few realistic figures having different proportions and postures indicative of the pre-schematic stage of development of the children (Lowenfeld, 1970) It is of note that a child exploring the pre-schematic stage does not have a full understanding of the dimension and size of objects, so may draw a person as tall as a house (Lipoff, 2011). Other design depicted varied textures created with linear and geometric patterns of different sizes. Lines drawn to show varying lengths and thickness along the outline or edges of the images displayed. Most of the scribbling was done using bright colours as seen in figure 3.



Figure 3: A catalogue of Scribbling

The next sets of drawings were images identified in the environment which reflected the children's observational prowess in the world around them as well as their cognitive development (Roland, 2006). The drawings of human beings have properly defined heads, trunks and limbs which are in some sort of proportion of their own. Others had a circle for the head and two vertical lines for legs. This buttresses what Winner (1982) as cited in Roland (2006) explained that there is a substantial proof to hint that children who draw figures without some body parts are surely capable of identifying these parts when asked to do so, but the idea of making a realistic likeness of a person has not yet struck them or occupied their interest. Forms developed were clearly recognizable and quite complex. However, some objects they drew appeared to float in space.



Figure 4: A Catalogue of Identifiable Drawings

The Procedure for Selecting Motifs for the Different Fabrics

The colour distribution revealed in their works signifies their fundamental knowledge on how to appropriate colour usage during their drawing processes (Kendra, 2012). This justifies the notion that their perception and emotion towards what they wear and empathy of what they desire are fundamental knowledge these young designers possess (Schacter, 2011). Conversely, design experts need to have the fundamental knowledge of these (perception, product emotion and empathy), to help make customers engage in products rather than just being a loyal consumer. Customarily such posture, informed the researchers not to waste time to design children's product that contradict their expectation (Olaire, Aziz & Ramli, 2012). The ability to express themselves and to get our demands done proves their fundamental knowledge of information technology and the ability to mentally visualize and draw from recall. Thus randomly sampling the drawings about 12 of them were selected, redrawn and modified by the researchers.



Figure 5 (a): The Selected Drawings to Be Used as Motifs

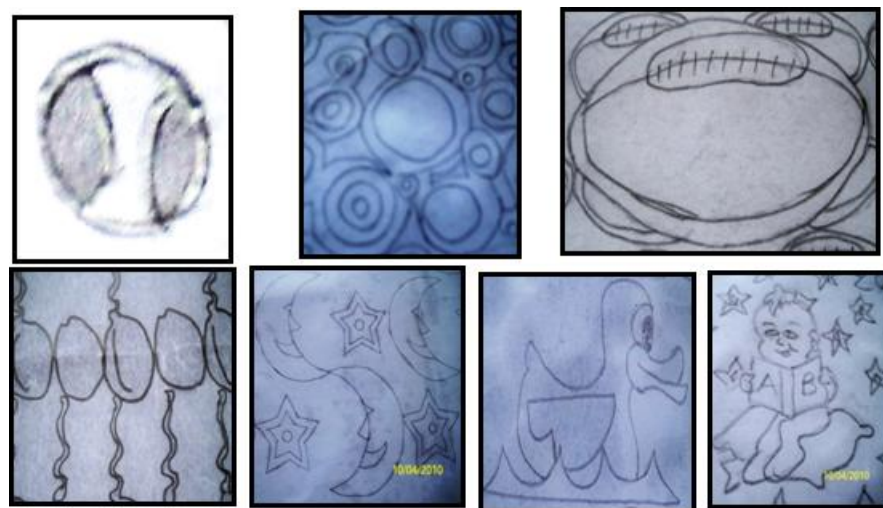


Figure 5 (b): The Modified Motifs Used For the Various Fabric Designs

Designing of Children's Wears

The modified motifs were then used in designing the various types of children's apparels. The circle was used in designing church wear (Figure 5c); a girl sitting on a pillow and reading a book and stars were used in designing school uniform (Figure 5d); a crescent and stars were used in designing night wear; a duck swimming in water was used in designing house wear (Figure 5e); the balloons were used in designing occasional wear (Figure 5f); the footballs, ratchet and tennis ball and the rugby ball were used in designing sportswear (Figure 5g to Figure 5i).



Figure 5 (c): The Designed Church Wear in Pencil**Figure 5 (d): The Designed School Uniform in Pencil**

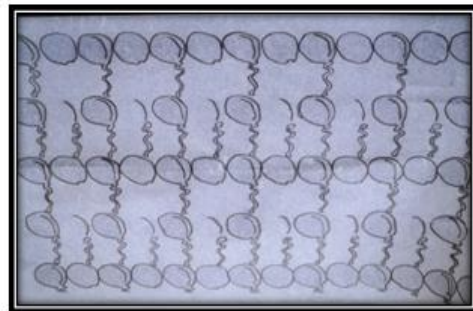


Figure 5 (e): The Designed House Dress in Pencil**Figure 5 (f): The Designed Occasional Wear in Pencil**

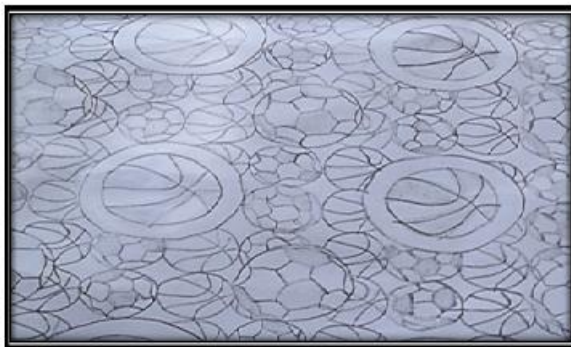


Figure 5 (g): The Designed Sportswear in Pencil**Figure 5 (h): The Designed Sportswear in Pencil**

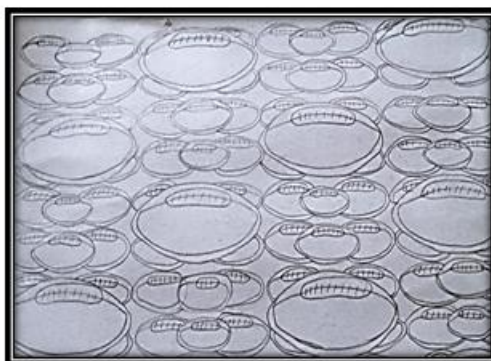


Figure 5 (i): The Designed Sportswear in Pencil

These designs were then made in Photoshop. This was done to see the actual outcome of the printed design. Several designs were made and the outstanding ones were chosen.

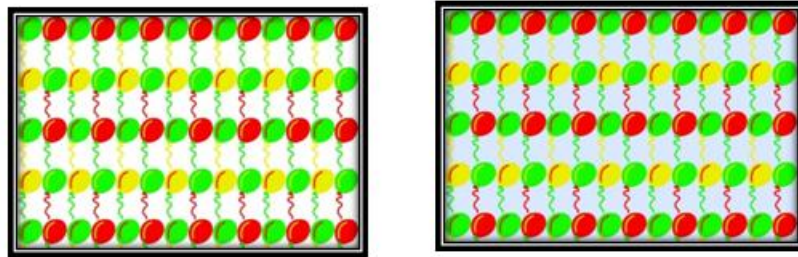


Figure 6 (a): Photoshop Design for Occasional Wear



Figure 6 (b): Photoshop Design for School Uniforms



Figure 6 (c): Photoshop Design for Sports Wears

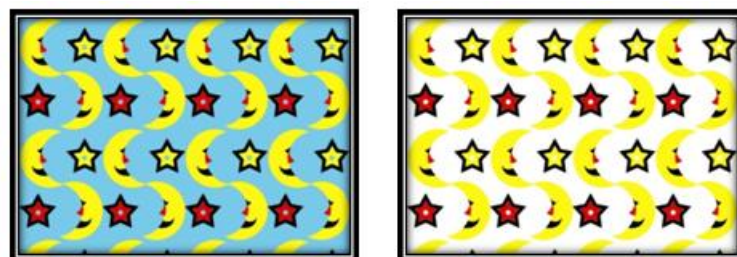


Figure 6 (d): Photoshop Design for Night Wears

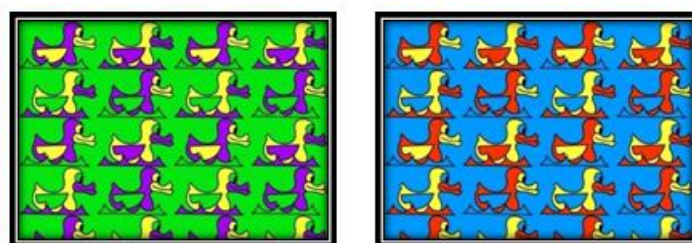


Figure 6 (e): Photoshop Design for House Wears

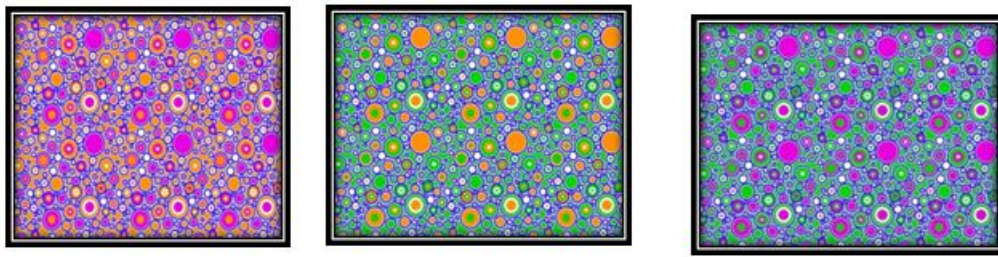


Figure 6 (f): Photoshop Design for Church Wears

After careful analysis and critiques, these designs (Figure 7) were chosen for the production of the children's apparel.



Figure7: The Final Designs That Were Used

The researchers also made some rhinoceros renditions of the children's clothes



Figure 8 (a): School Uniform Figure 8 (b): Church Wear Figure 8 (c): House Dress



Figure 8 (d): Sportswear **Figure 8 (e): Occasional wear** **Figure 8 (f): Night wear**

Screen Printing of Fabrics

The major material used for the project was the mercerized cotton plain weave fabric commonly used for the production of local textile design prints and fashionable fabric articles due to their absorption rate, comparative strength and suitability for printing. Other materials used were PVA glue (carpenter's or white glue), printing paste, and organdie mesh, plain sheets of papers, opaque ink, potassium dichromate and Wawa wood. These items were used in combination in different ways to suit the materials and techniques employed for the project. The tools and equipment available to the researchers included printing table, developing table, light box, electric sewing machine, gas cooker, pressing iron and ironing board.

Hand screen printing was employed at this stage to print the outcome of three of the designs that were produced. After masking the screens and ironing the plain fabrics to be printed, the fabric was spread flat and taut on the printing table, and held down with drawing pins. A test print was made with talcum powder to check the precision of repeat prints on the fabric before using the squeegee and printing paste to register the design on the screen onto the various fabrics (Figure 9).



Figure 9: Finished Printed Cloths

Sewing of Various Apparel

With the printed cloths handy, they were made in the three categories of children's apparel that were sampled for testing. The children were involved in the selection process of the styles of the sewn fabrics.



FrontBackFrontBack

Figure 10 (a): Church Dress for Girls and Boys



FrontBackFrontBack

Figure 10 (b): School Uniform for Girls and Boys



FrontBackFrontBack

Figure 10 (c): House Dress for Girls and Boy

In Ghanaian indigenous culture, the beauty of colour has visual, philosophical and socio-cultural interpretations. However, in the context of this project the colours that were used for the fabrics were the same as what the children used in their drawings suggesting that the choice of colours by children should be respected as they pour themselves into the designing process.

RESULTS AND DISCUSSIONS

Most of the children were able to express their thoughts on paper and were also able to interpret colour. The overall majority of them were very good and sharp in their creative ability and more children should be allowed to take part in such activities more often to help them express their feelings and ideas. From the studies conducted, children are able to draw and interpret colour as well as their drawings, these attest to the fact that children can contribute to the designing of

their own apparel. Although designed fabrics for children apparels are traditionally produced by adult designers, the study has revealed extensive possibilities in using child art as motifs in the designing and production of children's apparels through supportive supervision. Such designed fabrics can be used to produce varieties of children clothing's for various functions such as school uniform, church wear and house dress for both boys and girls as demonstrated in this project. This new optional approach of designing fabrics for children by involving them can serve as the foundation for effective designing of children's apparels. The abilities of the children to draw what they desire to associate with by using the elements and principles of design imaginatively to compose the needed objective in the context of their culture seems to be a revelation about their intellectual experiences (Piaget, 2001; Schaub and Dossey, 2005).

CONCLUSIONS

The appraisal conducted prior to the study indicated that such involvement of children to develop fabric designs for their clothes were practically absent: employing such unconventional approach to originate motifs for the production of children wear was virtually new in fabric designing. The absence of such approach from the survey, suggest that the use of 'Child Art Approach' as a methodology has either not found application in fabric design production or are not widely utilized by fabric design experts in Ghana. This study, therefore serves as a novelty that adds to and expands the scope of fabric design methodologies in Ghana. Both textile producers and fabric design experts can now explore this new concept to enhance the designing of children wear and other related works of textile artist for the economic development of the fashion industry in Ghana. The success of this project therefore opens a new avenue for textile designers to explore other forms of design processes to facilitate artistic design development of Ghana. Other researchers can pick up a similar project on child art where the designs could be based on only the raw drawings made by children without any modifications. It is time design experts involve children in the design, production of the children's own apparel and not impose on designs on them.

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REFERENCES

1. Adu-Agyem, J., &Enti, M. (2009). Learning: The role of aesthetics in education. *Journal of Science and Technology (Ghana)*, 29 (1).
2. Du Plessis, P., & Conley, L. (2007). Children and poverty in South Africa: the right to social security. *Educational Research and Reviews*, 2(4), 049-059
3. Enti, M. (2008). The influence of temperament on the artwork of children. Unpublished PhD dissertation, Department of General Art Studies, KNUST.

4. Garbarino, J., & Stott, F. M. (1992). What children can tell us: Eliciting, interpreting, and evaluating critical information from children? San Francisco: Jossey-Bass Publishers.
5. Hammer, E.F. (1980). *The Clinical Application of Projective Drawings*, Charles C. Thomas Springfield Illinois, USA.
6. Jacobs, J. A. (2002). Drawing is a catharsis for children. Department of Psychology, Missouri Western State University[<http://clearinghouse.missouriwestern.edu/manuscripts/363.asp>] (Assessed November 2014)
7. John Locke emphasizes the individual. (2008). *Microsoft Student 2008 [DVD]*. Redmond, WA: Microsoft Corporation.
8. Kendra, C. (2012). *Colour psychology: How colour impact moods, feelings and behaviours*. [<http://psychology.about.com/od/sensationandperception/a/colourpsych.htm>], (assessed September 6, 2012)
9. Lewis, A., & Lindsay, G. (1999). Researching children's perspectives. McGraw-Hill International.
10. Lipoff, S. (2011) Art Activities for Kids: The Pre-schematic Stage of Art
11. [http://www.myfreecopyright.com/registered_mcn/BSN79-JB9K2-9D73E], (accessed November, 2014)
12. Lowenfeld, V. and Brittain, W.L. (1970). *Creative and Mental Growth* (5thed.), The Macmillan Company, Collier-Macmillan Limited, London.
13. Lowenfeld, V. (1970), *Your Child and his Art*, Macmillan Co, United States of America, USA
14. Malchiodi, C. A. (2001). Using Drawing as Intervention with Traumatized Children. TRAUMA AND LOSS: Research and Interventions, 1(1)
15. [<http://www.tlcinst.org/drawingintervention.html>]. (Assessed October 21, 2014)
16. Matthews, J. (1989). How young children give meaning to drawing. In A. Gilroy & T. Dalley (Eds.), *Pictures at an exhibition: Selected essays on art and art therapy* (pp. 127–142). London: Tavistock/Routledge.
17. Matthews, J. (2003). *Drawing and painting: Children and visual representation*. London: Paul Chapman.
18. Olalere, F. E., Ab, Aziz, S., & Ramli, bin, I. (2012) "The application of computer aided design as tool for building user-centered design in consumer ceramics' product development". International Journal of Art, Culture and Design Technologies (IJACDT), 2 (2); Pg 30-42. (ISSN 2155-4196; eISSN 2155-420X). doi:10.4018/ijacdt.2012070103
19. Osei, M. (2013). Emotional Personality of Children as expressed in their drawings.
20. International Journal of Development and Sustainability 2(3)
21. Piaget, J. (2001). The Language and thought of the child (3rd Ed.). Boston: Routledge, Kegan Paul.
22. Potter, J. (2007). Draw Me A Story, Dance Me A Poem: Integrating Expressive Arts Fosters Emergent Literacy [http://www.wiu.edu/the_center/articles/draw2.html].
23. Roland, C. (2006). Young in Art: A developmental look at child art

24. [http://www.artjunction.org/young_in_art.pdf], (accessed 30th November, 2014)
25. Rollins, J. A. (2005). Tell me about it: Drawing as a communication tool for children with cancer. *Journal of Pediatric Oncology Nursing*, 22, 203-221.
26. Schacter, D. (2011). *Psychology*. Worth Publishers.
27. Schaub, B. G., & Dossey, B. M. (2005). Imagery: Awakening the inner healer. In B. M. Dossey,
28. Keegan L., & Guzzetta, C. E. (Eds.). *Holistic nursing: A handbook for nursing practice* (4th Ed), Boston: Jones and Bartlett pp. 5-30.
29. Selfe, L. (1977). *Nadia: A case of extraordinary drawing ability in an autistic child*. Londres: Academic Press.
30. Shuaib, A. A., & Enoch, O. F. (2012). Creative design: Its preferences and evaluation. *Arts and Design Studies*, 5, 5-13.
31. Skybo, T., Ryan-Wenger, N. R., & Su, Y. (2007). Human figure drawings as a measure of children's emotional status: Critical review for practice. *Journal of Pediatric Nursing*, 22(1), 15-28.
32. Zelizer, V. (1985). *Pricing the Priceless Child: The Changing Social Value of Children*. New York: Basic Books.
33. Zelizer, V. (2002). Children and commerce. *Childhood* 9 (4): 375–396.